AMENDMENTS TO THE SPECIFICATION

To update the Brief Description of the Drawings section, please replace the paragraph on page 6, lines 10-11, with the following paragraph:

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Figure 6 depicts an overhead view of tensioned strings connected by a rigid link **30** ~~(A)~~ or coupling. The two strings share a single tension adjustment device **31** ~~(B)~~.

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Please replace the paragraph beginning on page 6, line 18 with the following paragraph:

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Figure 11 shows an overhead view of a three-string unison with tuning pins **40** ~~(A)~~, two speaking length terminations **41** ~~(B)~~, a coupling link **42** ~~(C)~~ and hitch pins **43** ~~(D)~~. Additionally, the note contains two crimping bands in the nonspeaking portion of the string **44** ~~(E)~~.

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To update the Detailed Description of the Invention section, please replace the paragraph on page 7, lines 17-22, with the following paragraph:

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Figure 1 shows a theoretical cross section of a piano, specifically illustrating a three-string unison note configuration. The three strings **1** ~~(A)~~ are tuned to the same tension and frequency by turning tuning pins **2** ~~(B)~~. The strings pass over a bridge **3** ~~(C)~~ which transmits their frequencies into a soundboard **4** ~~(D)~~. The strings are anchored to hitch pins **5** ~~(E)~~ at their tail ends. String tension is resisted by an iron plate **6** ~~(F)~~. Other tuning mechanisms are well known in the art, including those commonly used in mandolins and guitars.

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Please replace the paragraphs beginning on page 8, line 21 and ending on page 10, line 24 with the following paragraphs:

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Figure 3 shows different embodiments of the invention. In **Figure 3A [3-A]**, strings can be coupled with soft materials such as dense felt or rubber. In **Figure 3B ~~3-B-1~~**, strings can be coupled with harder, less absorbent materials such as wood or metal to extend the sustain capabilities of the coupled strings. In **Figure 3C ~~3-B-2~~**, coupling can be extended to tripling if harder materials are used. In **Figure 3D ~~3-C~~**, soft materials can be fortified with heavier mass such as metal pins to adjust their dampening effect on the coupled strings. In **Figure 3E ~~3-D~~**, metal spring links can also be used to compress strings together and maintain solid contact. In **Figure 3F ~~3-E~~**, metal spring links can also compress strings away from each other. **In Figure 3G ~~3-F~~**, screw-type fasteners or similar fasteners can be used to secure the coupling device through compressive force.

As shown in **Figure 4**, the coupling can occur through slightly pulling two strings together, as with the coupling depicted in **Figure 3E [D]**. As shown in **Figure 5**, the coupling can also be created by slightly pushing the strings apart, as with the couplings depicted in **Figures 3A, 3B[1], 3C[B2], 3D[C], ~~and~~ 3E and 3G**. Similarly, the coupling can occur simply by mechanically linking the strings, such as depicted in **Figure 3F**, or through the semi-rigid link, shown in **Figure 7**, that is engineered to allow transmission of specific frequencies, dependant upon the resonance and transmission properties of the link. In most applications, the most practical method and device for coupling strings is as generally shown in **Figure 3E[D]** and in **Figure 9**.

Figure 9 shows alternate embodiments of metal couplings. In **Figure 9A**, two strings of a three-string unison are coupled by a lightweight metal spring link. In **Figure 9B**, a metal link spans the middle string to couple the two outer strings of a three-string unison. In **Figure 9C**, the right pair of strings can equally be coupled. In **Figure 9D**, two strings of a two-string unison can be coupled. In **Figure 9E**, through expansive forces as opposed to contractive forces any of the above scenarios can make use of a continuous loop link.

Figure 10A shows a typical muting pattern when tuning coupled strings. The figures refer to two, independent trichord notes. A soft wedge **20** is dampening the two right strings in each case. Since the wedge is contacting one of the coupled strings, it will affect the pitch of the other coupled string that is being tuned ~~(A)~~. Therefore the string used for reference to tune the

coupled string should also include a coupling and wedge to reflect the same frequency change (Figure 10B) ~~(B)~~. **Figure 10A** is the note that is being tuned. **Figure 10B** is a previously tuned reference point.

The process of coupling can also extend to include various material configurations. Material properties of the invention play a key role in its effect on piano tone. While a wide spectrum of musical tones can be produced through materials modifications, experimentation indicates that materials with high stiffness and low mass produce optimum results. Very soft materials such as low density felts, are not desirable because their damping properties produce a dull, short tone. Conversely, very dense materials typically exhibit high mass which also dampens tone. Ideal materials combine low mass and/or high stiffness. Plastic materials, such as rubber, work within a durometer range of 40-60, depending on the size of the material used. Medium to hard density wood species such as mahogany and maple can be used if dimensionally small. Metals such as steel, aluminum or titanium work well but must be dimensionally smaller than other softer material choices.

Once in place, a coupling will alter the conventional method for unison tuning. When two strings are coupled, neither can be muted or tuned without affecting the other paired string. Therefore, when a mute contacts either coupled string, the other coupled string will produce a muted, slightly elevated pitch. If this pitch is tuned against another note, as in the case of temperament tuning, then the other reference pitch should also reflect the effects of similar muting. For instance, **Figure 6** depicts an overhead view of tensioned strings connected by a rigid link **30** ~~(A)~~ or coupling. The two strings share a single tension adjustment device **31** ~~(B)~~. The coupling will assimilate the two oscillatory patterns, even if tensions are unevenly changed by the adjustment device. **Figure 10** shows a typical muting/tuning configuration for notes containing coupled strings.

Figure 11 shows an advanced embodiment of the invention. It depicts an overhead view of a three-string unison with tuning pins **40** ~~(A)~~, two speaking length terminations **41** ~~(B)~~, a coupling link **42** ~~(C)~~ and hitch pins **43** ~~(D)~~. The configuration depicted allows one to easily maintain the tuning of a three string unison by sliding a link similar to the coupling **44** ~~(E)~~ across the non-speaking string length. Additionally, the note contains two crimping links in the nonspeaking portion of the string **44** ~~(E)~~. If the left link is slid to the left, then the cumulative

pitch of the coupled pair will be elevated. These two links do not serve as couplings to allow unison oscillations, but serve as a simple way to adjust the pitch of both coupled strings. Coupling link **42** ~~(C)~~ will hold the two string pitches together if the sliding band causes minor differences in string tension. Use of the slideable tuning links further delays pitch drift, a common source of unison distuning.

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Please replace the paragraphs on page 16, lines 11- 28 with the following paragraphs:

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The process of coupling with links can be extended to include various geometric configurations. All embodiments employ the basic concept of linking together strings of similar pitch. **Figure 9** shows variations of this concept. In addition, as stated above, couplings can be installed between two strings. In this instance, an expander tool would be required to separate the two strings to be coupled a sufficient distance to allow placement of the coupling as depicted, for instance, in **Figure 3D[C]** and **3F[E]**. As one means for such a tool, the coupling rests on the inside of the tool's expansion "jaws," and once the strings have been separated, the coupling slides to the distal end of the jaws, and onto the strings. When the expander is released, the coupling remains in place between the coupled strings.

An easy method for positioning couplings onto piano strings involves the use of a special tool, designed to both slide and accurately position couplings along the string lengths. **Figure 13** shows a thin, flexible tool of metal or similar sturdy material and slotted near its tip. The slot **50** ~~(A)~~ fits over a coupling **52** ~~(C)~~ which has been placed onto the string pair **53** ~~(D)~~. When the tool is pushed, the coupling is made to slide down the string length until the tool tip **51** ~~(B)~~ comes to rest against the bridge pin string termination **54** ~~(E)~~. The distance from the slot to the tip of the tool **55** ~~(AB)~~ produces a consistent coupling location. Use of the tool can greatly simplify installation of the Pitchlock couplings in certain installation conditions, including upright pianos, and some grand piano configurations.

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